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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,263	04/01/2004	Henrik Pettersson	NTR-014-US	8452
<div><div>7590</div><div>01/25/2008</div><div>Daniel H. Golub 1701 Market Street Philadelphia, PA 19103</div></div>				
			EXAMINER HALL, ASHA J	
			ART UNIT 1795	PAPER NUMBER
			MAIL DATE 01/25/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/814,263	Applicant(s) PETTERSSON ET AL.	
	Examiner Asha Hall	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,16 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (US 5,554,460) in view Nakamura (US 6,291,763).

With respect to claim 1, Wu et al. discloses an electrochromic system (abstract), comprising a pattern of a porous structure located on a substrate (12) (col. 2; lines: 38-40) as shown in Figure 1, which structure constitutes at least one monolithic electrochemical cell (col. 1; lines: 7-15) and comprises a working electrode (20) (col. 4; lines: 5-6), an insulating layer (4) (col. 2; lines: 54-56) and a counter electrode (20) (col. 4; lines: 5-6), and an electrolyte absorbed in said porous substrate (col. 2; lines: 57-60 & col. 5; lines: 46-52), but Wu et al. fails to disclose wherein sealing material surrounds said porous structure to form at least one sealed monolithic electrochemical system comprising a front plane consisting of said substrate and the porous structure and a rear plane consisting of the sealing material and wherein said front plane and rear plane are heated and pressed together, and sealed along the edge of the pattern of the porous structure by virtue of a plastic layer forming part of the sealing material being melted and joined together with said front plane.

Nakamura discloses an electrochemical system/photoelectric conversion device (abstract) and further depicts in Figure 1 a front plane (Figure 1) consisting of a substrate (col. 1; lines: 65), porous structure (col. 1; lines: 31-33), and a rear plane as shown in Figure 1. Nakamura further discloses a sealing material such as a liquid or pasty resin/plastic material that is applied to the cells roll casting/pressing followed by heat sealing to enhance the strength and light transmission and also for weatherproofing (col. 31; lines: 30-40). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a resin sealing by way of heat and pressure as taught by Nakamura to the electrochromic device of Wu et al. in order to enhance the strength and light transmission and also for weatherproofing.

With respect to claim 16, Wu et al. discloses a sealed monolithic electrochromic system (col. 2; lines: 38-40) comprising a substrate supporting a pattern (col. 3; lines: 60-65), located on said substrate (12), of a porous structure which comprises a working electrode (20), an insulating layer (4) (col. 2; lines: 54-56) and a counter electrode (20) (col. 4; lines: 5-10), electrolyte absorbed in said porous structure for forming at least one electrochemical cell (col. 5; lines: 46-52) and contacts for said working electrode and said counterelectrode for interconnection with at least one electric circuit (col. 3; lines: 60-65), but fails to disclose a sealing material located on said substrate and covering said porous structure, such that the sealing material comprises an adhesion ply of plastic which is applied to said substrate and porous structure and a laminate comprising at least an adhesion layer and a barrier layer, in which the adhesion layer is placed over said adhesion layer, and in that said substrate, porous structure and sealing material

are joined together to form a sealed monolithic electrochromic system by melting the substrate, the adhesion ply and the adhesion layer together.

Nakamura discloses an electrochemical system/photoelectric conversion device (abstract) and further depicts in Figure 1 a front plane (Figure 1) consisting of a substrate (col. 1; lines: 65), porous structure (col. 1; lines: 31-33), and a rear plane as shown in Figure 1. Nakamura further discloses a sealing material such as a liquid or pasty resin/adhesion material that is applied to the cells roll casting/pressing/laminated roll forming followed by heat sealing to enhance the strength and light transmission and also for weatherproofing (col. 31; lines: 30-40). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a resin sealing by way of heat and pressure as taught by Nakamura to the electrochromic device of Wu et al. in order to enhance the strength and light transmission and also for weatherproofing.

As to claim 17, modified Wu et al. discloses sealed monolithic electrochromic system as claimed in claim 16, and further discloses a barrier consists of a metal foil (col. 1; lines: 30-33).

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asha Hall whose telephone number is 571-272-9812. The examiner can normally be reached on Monday-Thursday 8:30-7:00PM EST.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on 571-272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJH



ALEXA D. NECKEL  
SUPERVISORY PATENT EXAMINER

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :April 1, 2004 and November 10, 2005.